2007 Volume 19, Issue 1

EPI NORTH

The Northwest Territories' Epidemiology Newsletter

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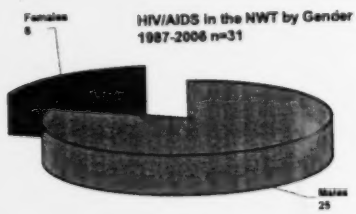
Is It Time To Revisit HIV/AIDS Testing In The Northwest Territories?

Sunil Varghese, Fourth Year Medical Student,
Queen's University
Dr. Kami Kandola, Deputy Chief Medical Health Officer,
Stanton Territorial Health Authority

In Canada, there is an estimated 58,000 people living with HIV/AIDS, among whom up to 15,800 persons (27% of the total) may be unaware of their diagnosis. In the Northwest Territories, the most recent epidemiological information reveals that between the years 1987-2006, there were 31 reported cases of HIV/AIDS[1]. Twenty-five cases were male and 28 cases were among those between the ages of 20 to 49. Six AIDS related deaths have occurred.



Risk factors for HIV/AIDS include: homosexual contact, heterosexual contact, injection drug use (IDU), blood transfusion and perinatal exposure . In the NWT, men having sex with men, heterosexual contact and IDU are the predominant risk factors.

HIV testing first became available in 1985 and was implemented using a rights based model. By 1993, testing guidelines emphasized the voluntary, confidential and informed features of testing.

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Northwest Territories Health and Social Services

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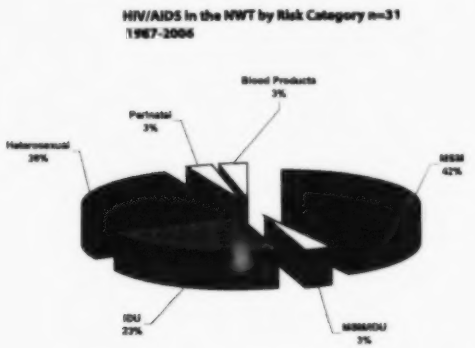

Explicit consent must be obtained for HIV testing. Pre-test counselling identifies risk factors and allows for a discussion of the testing process and the implications of a reactive or non-reactive test. The first test searches for HIV antibodies via enzyme immunoassay (EIA). If this first test is reactive, a second EIA is done on the original sample. If this is again reactive, a confirmatory Western Blot test is done on the original sample. If the EIA is non-reactive, no further testing is conducted. After receiving the test results, the patient undergoes post-test counselling. Tests are interpreted, risk factors are identified and follow-up testing (if the EIA was non-reactive) is encouraged if the patient has engaged in high-risk activities within the past three months.

Three testing options are available across Canada: nominal, non-nominal and anonymous testing. Each is available in a number of settings (e.g. clinics, public health offices, outreach programs).

Nominal testing means the test is ordered using the patient's name, along with demographic information that varies depending on the province/territory, but may include age, gender, residence, name of health provider, country of birth, and ethnicity. Furthermore, information on the reason for the test and the test result, is recorded in the chart.

Non-nominal testing is a variation of the latter in that the test is ordered using a code in place of the patient's name. Only the heath care provider is aware of the identity of the patient.

Anonymous HIV testing is ordered and carried out using a code known only to the patient and results are only available to that same individual. Demographic data may also be collected at the time of testing.

As of May 2003, both HIV and AIDS are legally reportable diagnoses in all provincial/territorial jurisdictions across Canada. Reactive cases may be reported nominally or non-nominally, and depending on the jurisdiction, varying amounts of demographic data are included.

Partner notification is a component of reporting and jurisdictions differ in their approach. Some ask the patient to directly notify partners. Other jurisdictions non-nominally inform partners, usually through public health staff, while others ask patients to notify partners within a specific time period, after which the health care worker will assume the task.

There is a growing acknowledgement that more people need to be tested in the NWT. Anonymous HIV/AIDS testing is not offered in the NWT, but this policy decision has recently been questioned. Although nominal reporting is legislated, non-nominal testing has always been allowed. The NWT also has specific legislation requiring partner notification, to be done by the health care provider or through referral to the Office of the Chief Medical Officer, within one week of a confirmed reactive case.

Aboriginal communities generally have a high number of HIV risk factors and are disproportionately represented in HIV/AIDS cases. People living in small isolated communities also face numerous obstacles for HIV testing. These can include lack of confidentiality, unavailability of culturally-sensitive counselling and lack of resources to travel independently to larger centers for testing and results.

Anonymous HIV/AIDS testing has been universally recommended in guidelines addressing testing issues. Studies indicate that anonymous testing encourages people to come forward for testing (particularly those at greatest risk) and may also provide "Best Practice" pre and post-test counselling. However, there are a number of challenges facing anonymous testing in the NWT.

Instituting an anonymous HIV testing process could entail a conflict with current legislation requiring nominal reporting and partner notification. Furthermore, the NWT has a small population. There may not be the critical numbers required to make anonymous testing cost effective in small communities.

The greatest challenge, however, is that anonymous testing in smaller communities may be impractical. The interconnected population in rural communities makes maintaining anonymity and confidentiality difficult. The unique funding of health services and mandatory partner notification compounds this problem. Finally, treatment would result in loss of anonymity as test results, follow-up studies, and medical treatment (for HIV or otherwise) would involve the broader health team and be recorded in various documents.

While anonymous testing is not feasible, other alternatives to increase testing among rural and at-risk populations exist. Efforts to destigmatize HIV/AIDS should be strengthened. The question of making anonymous testing available ultimately stems from the negative societal perception of HIV/AIDS and the risk factors for transmission.

The potential role of Rapid HIV testing should be investigated. Local health care providers, or outreach workers, could administer these single use kits outside the laboratory. They often provide results within 30 minutes and have a specificity and sensitivity equivalent to EIA. Laboratory EIA followed by Western Blot testing are needed to confirm positive results. Rapid HIV testing may help overcome barriers to HIV testing in rural/Aboriginal communities as it addresses issues of remoteness, confidentiality and cultural sensitivity.

HIV/AIDS is a growing problem in Canada. HIV/AIDS testing has historically given rise to ongoing debates between the rights of the individual and the rights of the public. Current efforts to combat the problem are premised in the uncertainty and stigma originally attached to the disease. However, our understanding has significantly progressed, and treatment options are available that can ensure a long and high quality of life.

Though a negative perception of HIV/AIDS still exists, it may be time to redefine the role of HIV testing in society. Perhaps it is time to consider a broader "opt-out" approach to testing, as is already implemented in pre-natal care. While including HIV testing as a general screening test may be impractical, there is a broader role for testing that could better capture at-risk populations.

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1 Note these numbers do not include the 10 cases of HIV in Pre-Nunavut. Numbers may therefore differ from official statistics reported by the Government of Canada.

Hospitalization of NWT Infants[1]

David MacDonald, Sr. Health Analyst
Department of Health & Social Services

Introduction

The first year of life can be a fragile period. What may be a minor ailment to an adult, or even a toddler, can have a severe effect on the health of an infant. Moreover, what happens in the first year of life can affect health and vitality across one's lifespan.

Next to seniors, infants were the most frequent consumers of hospital-based services on a cost per capita basis between 2000/01 and 2003/04. The vast majority of these service costs, more than 90%, were for hospitalizations.

Over this four-year period, the average annual cost of infant inpatients was $1.9 million for 214 admissions by 141 unique patients. Almost 90% of the patient admissions and costs were associated with a diagnosis. The remaining hospitalizations were either associated with a known diagnosis (such as post-surgery care) or related to the investigation of a health problem before a diagnosis had been made.

This article profiles the top five reasons (illnesses) leading to the hospitalization of infants.[2]

Rank	Metric			
	Unique Patient (148)	**Admissions** (191)	**Bed Days** (1,051)	**Costs** ($1,680,451)
1	Respiratory System	Respiratory System	Respiratory System	Respiratory System
2	Perinatal Period	Perinatal Period	Perinatal Period	Perinatal Period
3	Infectious Disease	Congenital Anomalies	Congenital Anomalies	Congenital Anomalies
4	Digestive System	Infectious Disease	Digestive System	Infectious Disease
5	Congenital Anomalies	Digestive System	Infectious Disease	Digestive System
Other	14%	13%	11%	10%

Diagnosed Conditions

In terms of unique patient admission bed days and cost measures of inpatient activities, the top five conditions were: respiratory system related conditions occurring in the perinatal period, congenital anomalies; infectious and parasitic diseases; and digestive system conditions (see Table 1).

Respiratory diseases were responsible for 37% of hospitalization costs, representing approximately $628,000 per year. Bronchitis and bronchiolitis were responsible for more than half of all hospitalization costs due to respiratory conditions. Various forms of pneumonia were the primary reason for a further 36% of costs, with the remaining costs spread across a number of respiratory issues, including throat infections, influenza and asthma.

Conditions occurring during the perinatal period (20th week of gestation to 28 days after birth) were responsible for 31% of costs - $514,000 per year. Approximately 60% of hospitalization costs under this category were due to issues with infants having either a low-birth weight and/or a short gestation period (premature). A further 16% were due to infants having respiratory issues during or after birth. The remaining conditions occurring during the perinatal period included such things as neonatal jaundice and digestive

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2	Perinatal Period 17%	Perinatal Period 17%	Perinatal Period 31%	Perinatal Period 31%
3	Infectious Disease 7%	Congenital Anomalies 8%	Congenital Anomalies 13%	Congenital Anomalies 11%
4	Digestive System 7%	Infectious Disease 7%	Digestive System 6%	Infectious Disease 6%
5	Congenital Anomalies 6%	Digestive System 6%	Infectious Disease 5%	Digestive System 6%
Other	14%	13%	11%	10%

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disorders.

Congenital anomalies (conditions present at or before birth) were the primary reason for a further 11% of the cost of all hospitalizations - $182,000 per year. Anomalies were primarily heart and other circulatory system related (73%), and digestive system related (17%). The remaining hospitalization costs were due to anomalies related to other systems in the body: nervous, urinary, musculoskeletal, etc.

Infectious diseases and digestive system conditions both were responsible for a further 6% each of hospitalization costs; $98,000 and $95,000, respectively. Infectious diseases primarily included intestinal infections, blood poisoning, whooping cough, and viral conditions with blister-like rashes (e.g., chickenpox). The digestive diseases requiring hospitalization primarily included gastroenteritis and colitis, esophagitis (acid reflux), hernias and other intestinal conditions.

Supplementary Classifications and Ill-defined conditions

Hospitalizations for supplementary classifications averaged $111,000 per year, while those for symptoms, signs and ill-defined conditions averaged $72,000 per year. Under the broad category of supplementary classifications, most hospitalizations were due to recovery and care after surgery or a treatment. Hospitalizations due to ill-defined conditions primarily included developmental delays, respiratory problems, seizures and fevers.

Conclusions

Acute respiratory conditions, such as bronchitis and pneumonia, were a major driver of hospital use. To some extent, respiratory problems in infants are caused and/or exacerbated by environmental effects, such as exposure to second-hand tobacco smoke and poor ventilation in houses.[3] These conditions, especially pneumonias, can also be brought on by complications to common viral infections (e.g., cold or flu). Furthermore, infants and children who have contracted pneumonia are at a greater risk of developing chronic lung problems later in life.[4]

The hospital treatment of premature/low birth weight babies and infants with congenital anomalies were also significant cost drivers. Tobacco use, and/or exposure to second-hand smoke while pregnant, can result in a premature/low birth weight delivery.[5] Such infants are at an increased risk of other health problems including asthma, high blood pressure and heart disease not only in the first year of life but also later in life.[6] Congenital anomalies (such as heart defects) were also prominent – which may be an indication of insufficient nutrient (e.g., folic acid) intake while pregnant.[7]

Although it is important for parents to seek medical attention when infants manifest health problems, it is also worth noting that many of the illnesses profiled in this article are to a certain extent preventable and need not result in hospitalization.

References:

1 This article is based on the upcoming NWT Hospital Services Report - to be released in 2007. All numbers in this article are subject to future revisions.

2 Infants are NWT residents under 1 year of age seen in any hospital in and outside of the NWT. Newborns are excluded from this analysis.

3 Meirion Evans and Alan Bennett, "Housing – adverse effects" in Health Evidence Bulletins, February 1998, No. 10.

4 Harvey Simon et al, "Pneumonia" in Well Connected (Reuters Health), June 2001, Document 64, p. 7.

5 Alberta Alcohol and Drug Abuse Commission, The Truth About Smoking and Pregnancy, 2002.

6 City of Berkeley, Department of Health and Human Services, Health Status Report, 2002 – Low Birth Weight.

7 Folic acid is found in some foods such as dark green vegetables, beans, lentils corn and oranges, among others, as well as is added to flour (required by the Canadian government). Generally, a supplement of folic acid is recommended before and after becoming pregnant. See Lynn B Bailey and Robert J. Berry, "Folic acid supplementation and the occurrence of congenital heart defects, orofacial clefts, multiple births, and miscarriage" in American Journal of Clinical Nutrition, May 2005, Vol. 81, No. 5, pp. 1213S to 1217S, and Alana Kronstal, "Folic Acid: The Healthy Baby Vitamin" in Epi North, Summer 2002, pp 4 to 5.

Fort Smith Health and Social Services Authority Midwifery Program

Lesley Paulette, Midwife
Fort Smith Regional Health Authority

In April 2005, the Fort Smith Health and Social Services Authority (FSHSSA) officially integrated midwifery services into its programming, making it possible once again for birthing to be part of the normal continuum of community life and services.

Background

Before the arrival of healthcare providers from the south, women in the Fort Smith area gave birth as they lived; in family camps, small communities, tents and in cabins.[1] In locations determined by the seasonal rhythms of a life intimately connected to the land. Women gave birth with the help and support of family members and traditional midwives who learned from a young age the skills and customs related to conception, pregnancy and birth. The risks associated with childbirth were not ignored but were managed in the same way as all the other risks associated with living, through the application of traditional knowledge and cultural practices that had evolved over time to help ensure the survival of the people.[2]

In the wake of rapid cultural change and the growth of medical services in the 20th century, traditional birthing practices were gradually displaced in many northern communities, including Fort Smith. The missions and later the government took control of medical care, resulting in a definite shift away from viewing birth as a cultural, spiritual and social event and setting the stage for birth to be viewed as a medical act.[3]

In Fort Smith, physicians and nurses provided birthing services, first at St. Ann's Hospital from 1914 to 1979, and later at the Fort Smith Health Centre (FSHC), a Level I hospital, up until 1995. Although medically managed, birth was still a normal event in the life of the family and the community.[4]

By the mid-1990's, it was becoming increasingly difficult to recruit physicians for general practice in Fort Smith, and virtually impossible to recruit doctors willing to provide obstetrical services in a small rural Level I hospital. As a result, birthing services were discontinued and pregnant women were required to leave their homes and families at least two weeks prior to their due date to await delivery of their babies in Yellowknife at the Stanton Territorial Hospital. While some women were satisfied with this arrangement, many described the hardships that they and their families experienced, ranging from financial costs to the family, to the psychosocial costs of loneliness, stress, and disruption of family relationships. Community members also expressed concern about the impact on the community as a whole when the life cycle ceremony of birth is removed and only death remains.[5]

In the meantime, a renewed interest in community birthing gradually developed as more and more Fort Smith women looked outside the formal healthcare system and sought the help of two Alberta-registered midwives providing community-based maternity care, including homebirth services. As a direct result of community advocacy, and following a process of dialogue amongst various stakeholders, it became clear that the integration of regulated midwifery into a publicly-funded healthcare system would be necessary to help meet the needs of women and ensure the sustainability of community birthing services in Fort Smith.

The Developmental Phase

With a contribution agreement from the Primary Health Care Transition Fund (PHCTF), the Fort Smith Health and Social Services Authority in 2003 undertook a project to integrate midwifery services into the healthcare system. This developmental project proceeded in parallel with a territorial legislative initiative that resulted in the proclamation of the *Midwifery Profession Act* and *Regulations* in 2005 and the amendment of other legislation enabling midwives to practice to their full professional scope within the framework and structures of the NWT healthcare system.

The first year and a half of the project focused on increasing awareness and understanding between both the public and other healthcare professionals about the scope and role of the registered midwife, in addition to developing internal policies and practice guidelines for midwifery practice within the Authority. A critical component of the project was the development of a multidisciplinary approach to the provision of maternity care, including the formation of a Maternity Care Committee made up of midwives, physicians, nurses and clinical care managers who meet regularly to review clinical care plans and discuss clinical care and risk management issues. The Committee includes a physician representative from the Obstetrical Department at Stanton Territorial Hospital, thus providing an invaluable link with the regional referral centre.

In April 2005, in the third and final year of the developmental project, the two midwives previously providing independent services in Fort Smith were hired as NWT registered midwives to provide clinical care within the Fort Smith Health and Social Services Authority. A policy of informed choice was adopted, giving all pregnant clients the option to receive their maternity care either through the new midwifery program or from physicians at the medical clinic.

Clients choosing midwifery care are given the option to travel to the territorial hospital in Yellowknife where specialist services are available or to remain in the community if their pregnancy is uncomplicated by significant risk factors. All clients receive a handbook early in pregnancy outlining their choice of birthplace settings and the benefits and limitations of each. A process is in place that guides clients and caregivers in working together towards an informed choice of birthplace setting. The process includes a discussion of each client's health and progress of pregnancy in relation to the Authority's guidelines for screening for community birth. The process also includes a review by the Maternity Care Committee of each client's care plan and birthplace preference at approximately 34 weeks gestation, and the sharing of the Committee's recommendations with the client.

In keeping with the principle of informed choice embodied in the NWT Midwifery Practice Framework, clients choosing a community birth may birth either in the Health Centre or in their home. A newly renovated birth room in the Health Centre provides a family-centered environment within the facility, which is an attractive option for many clients. It is located in close proximity to the midwifery office and the prenatal consultation room, in effect creating a maternity centre within the facility.

By the end of the final year of the PHCTF project (March 31, 2006), the midwifery program was attracting a growing clientele of pregnant women who responded positively to a service model that supports them as primary decision-makers about their own care. Community births were once again taking place in the Health Centre and postpartum and newborn care, equally important components of the program, were being provided through home visits to families who had birthed in Fort Smith as well as to families returning with their babies from Yellowknife. The benefits of this care were evident in the infant feeding outcomes among midwifery clients, more than 80% of whom continued to breastfeed their babies beyond three months.[6]

An Ongoing and Essential Service

Consistent with the goal of the PHCTF, which is to support and sustain innovation in primary health care, the FSHSSA has secured funding to ensure the ongoing provision of midwifery services to the community beyond the project phase. Today, the midwifery program provides care to approximately 90% of the childbearing families in the community. The monthly prenatal client load has tripled since the outset of the program, steadily increasing from 11 clients in the month of April 2005 to 33 clients in the month of January 2007. The number of community births also continues to increase; there were five community births in 2005 and 14 community births in 2006. The growing numbers of postpartum clients continue to access the support of the midwifery team for up to twelve months after the birth of their babies.

A review of program data for the calendar year 2006 is summarized in Table 1. Forty-one families in Fort Smith gave birth in 2006 and 78% of these families (n=32) were followed by the midwifery program. More than half of these clients (19 out of 32) had intended to give birth in the community, but three clients required transfer to the regional centre prenatally (intrahepatic cholestasis; gestational hypertension; prolonged PROM), and one client required intrapartum transfer to Edmonton for premature labour at 33 weeks gestation. Fifteen women attempted a community birth at term, but one was transferred intrapartum (7% transfer rate) for failure to progress in a nullipara. A different kind of intrapartum transfer occurred when a client who was planning a VBAC at the regional centre went into labour at 37 weeks, just days before her scheduled referral, and was sent out by medevac. In all, fourteen planned births took place in the community in 2006. From April 1, 2005 to December 31, 2006, 20 women have attempted a community birth and only one of these had been transferred intrapartum (5% transfer rate).

Table 1: Fort Smith Midwifery Program Activity (January 1 – December 31, 2006)	
Babies born to Fort Smith families	41
Baby/mother dyads followed by midwifery program	32 out of 41
Clients intending a community birth	19
• Transfers for complications prior to term (includes one premature labour)	4 out of 19
Clients attempting a community birth at term	15
• Transfers for intrapartum complications	1 out of 15
Births completed in the community	14
Clients intending to birth outside of the community	13
• Transfers prior to scheduled referral at term	1 out of 13

Conclusion and Future Directions

The PHCTF project was successful in meeting its goal of enhancing maternity care services for Fort Smith women through the introduction of midwifery services in the health authority. The midwifery program has resulted in improved access to primary health care providers who provide the full continuum of maternity services, including community birthing. Services are further enhanced because coordination and communication amongst service providers, both locally and regionally, has greatly improved.[6]

With the program well established and accepted by the community, there are strong indications that client volume and community-birthing activity will continue to increase in the coming year. An evaluation framework has been developed, providing the basis for future data collection, performance measurement and reporting. The experience that is emerging in Fort Smith will provide a valuable foundation for other communities in the NWT wishing to introduce midwifery services in their continuum of care.

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Spousal Violence in the Northwest Territories:

Implications for Health Care Providers

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What is Spousal Violence?

Violence in the homes of residents in the Northwest Territories is a profound issue that is unfortunately quite common. Although violence and abuse can happen between any two people, the victims who suffer the most harm are those who are most vulnerable. This points to the high risk of women, children, persons with disabilities and older persons. Given the complexity of interpersonal relationships and the study of such, there are a number of terms commonly used when discussing violence that can occur between people who have complex relationships with each other.

Family or domestic violence refers to violence that occurs within a family unit. There may be more than one perpetrator or victim, and people in the extended family who live outside of the home may also be involved. Anyone can be a victim of family violence. Most often it is vulnerable family members such as women, children, older persons, or persons with a disability that are targeted.

Intimate partner violence refers to violence that occurs between two people in an intimate dating, marital or common-law relationship. Some Canadian research indicates that violence between intimate partners can begin as early as age 13.[1]

Spousal violence is a subset of intimate partner violence that excludes violence between those who are in dating relationships.

For the purposes of this article, the focus will be on spousal violence, given that the majority of Canadian research has focused on the issue of violence between intimate partners using these parameters.

Patterns of abuse suffered by individuals at the hands of their intimate partners tend to vary, as there are several forms abuse can take. These forms can be grouped into four broad categories – financial abuse, sexual abuse, physical abuse, and psychological abuse. Financial or economic abuse consists of one partner limiting the access of the other to financial resources. Possible examples are: controlling what a person is allowed to buy, taking the money a person has earned and not allowing access to it, or not allowing a person to work outside the home in order to be financially independent. Sexual abuse refers to a complete disregard for a person's sexual boundaries, and could consist of forcing a person to have sex, belittling a person who does not wish to perform certain sexual acts, and/or expecting a person to have sexual acts with others. Psychological or emotional abuse can make a person think that they are worthless and/or crazy. It can involve name calling, public embarrassment, accusations of infidelity, telling lies about the person to friends and family, not allowing the person to leave the home, threats of harming self, the other person, pets, children, or possessions, and many other behaviors. Finally, physical abuse consists of actually physically harming an individual with or without the use of weapons.

Rates of Spousal Violence

All categories of abuse have varying prevalence rates, with the literature indicating that physical violence tends to be the most common.[2] However, findings such as these should be interpreted with caution because the higher prevalence of this type of abuse may be due to the physical evidence that is left behind. This makes it easily identifiable as a criminal behaviour, making it more likely that those who suffer this type of violence will seek outside help. It is thus important to recognize that a comparison of the rates of differing types of spousal violence is not possible due to the underreporting of all abusive behavior, particularly behaviors that are subtle and leave no physical evidence behind. At the same time, the presence of one type of abuse in an intimate relationship usuallyindicates that other types of abuse are present as well.3 For instance, it is thought the psychological abuse may be a precursor to sexual and physical abuse and that physical abuse rarely occurs alone.

Across Canada, the 2004 General Social Survey estimated that approximately 7% of female Canadians and 6% of male Canadians aged 15 and over experienced some sort of spousal violence in the past five years.4 However, females were 2.5 times more likely to be choked, beaten, or threatened with a gun or a knife, or have had a weapon used against them. Females were also two times more likely to be injured and three times more likely to fear for their lives or to take time off from their everyday activities because of the violence.

Family Violence Shelter Utilization 2003/04 Admission Estimates per 1,000			
	NWT	Canada	NWT/ Canada Ratio
Women	20.0	4.6	4.4
Children	36.1	7.5	4.8

Note: Numbers are estimates subject to future revisions.
Sources: Statistics Canada, NWT Department of Health and Social Services, and NWT Bureau of Statistics.

For the first time in 2004, the General Social Survey included responses from residents of the three territories. Rates of spousal violence in the territories were found to be higher than in the provinces (12% versus 7%), with no comparison available for rates of violence against each gender.[5] Rates of shelter use in the territories were also found be higher than in the provinces. The most recent family violence shelter statistics indicate that 231 women and 185 children were admitted to shelters in 2005/2006, for a total of 6,766 bednights (provided by GNWT Department of Health and Social Services)

High Risk Groups

Research indicates that the most powerful risk factor for being a victim of violence is to be female.[6] Canadian research indicates that the highest risk age group for women to become victims of spousal assault is between ages 18-24. Incidence, as well as fear of violence affects women on a daily basis, impacting decisions on choice of clothing, where it is safe to go, with whom to associate, and what mode of transportation to use.[7]

In addition to being female, there are a number of factors that can increase one's risk of being in a violent spousal relationship. Basically, anything that can be perceived to make the woman more vulnerable or less likely to access services will increase her risk. These factors include: having a disability, being older or younger, being a visible minority, speaking a language other than English (or French, depending on your location in Canada), being pregnant or being a new immigrant (to Canada or to a community). Two of these factors will be briefly discussed here to highlight how these factors can increase the risk of victimization for women.

Aboriginal Women:

Although there has been little research carried out there is a growing concern on the prevalence of violence experienced by aboriginal women. Available information suggests that a minimum of 25% of Aboriginal women experience domestic violence, with rates as high as 90% in some communities8 The 2004 General Social Survey found that Aboriginal women are three times as likely9 as other women to be victimized by their intimate partners. In 2005/2006, 80% of the women who were admitted to family violence shelters in the NWT were of Aboriginal or Inuit ancestry (provided by GNWT Department of Health and Social Services).

Pregnant Women:

In 1993, there was a national Violence Against Women survey which gathered more specific information about victimization than any other national survey completed to date. It found that 21% women who were abused by their partner were assaulted during pregnancy.[10]Of those women, 40% reported that the abuse began during pregnancy. Pregnant women were also found to be four times more likely to experience very serious forms of violence. Another Canadian study reported that of those women who reported abuse previous to the pregnancy, 63.9% reported that the abuse escalated during pregnancy.[11]

Limitations of the Data

All statistics related to family violence must be interpreted with some caution. This issue is one that is vastly underreported by both victims and perpetrators for a number of reasons. There may be a fear of intervention by authorities, fear that the abuse will become worse, and sometimes a lack of knowledge that what they are experiencing is not normal. Community social pressures also serve to keep people quiet about these issues, especially in communities in which violence is condoned as an appropriate way to solve problems and sanctions against abusers are low.[12]

There are also problems with the methods of data collection. The General Social Survey for instance was only conducted via telephone in the official languages of Canada – French and English. This excluded many possible respondents in our territory and thus may have provided an under-representation of the rates of spousal violence. It is also the case that shelter use of statistics vastly underestimate the number of women

who are victims of violence.

In any area of our country, only a portion of women who are victimized go to a shelter for service. However, in the NWT there are only five shelters that serve our vast geographical area and 33 communities, making it even more difficult for women to access this type of service. Another source of data that could be used to examine the prevalence of spousal violence is RCMP data related to the number of investigations and arrests. However, there is only a small portion of victims (28%)[13] who actually report such events.

Impact on Women

Many women who have been abused by their spouses report a variety of emotional, psychological and physical afflictions that affect their personal lives, health and professional productivity.[14] These women tend to use more health care services than other women and indicate higher levels of attempted suicide, depression, and abuse as children. They tend to suffer from direct physical injury such as broken bones, bruises, burns, cuts, etc. These women do not tend to be in a position to protect their sexual or reproductive rights, which can lead to unplanned pregnancies as well as sexually transmitted infections.

Indirect impacts on health stem from lowered self-esteem and a tendency to be isolated from both formal (including appropriate medical care) and informal resources. Living with high levels of stress over a prolonged period can have serious impacts on one's health and well- being. Furthermore, many women cope with the stress of being in an abusive relationship in destructive ways, such as using drugs and alcohol or self harm behaviors, that also have a negative impact on health and well-being.

Impact on Children

Children exposed to violence are also negatively impacted in a number of ways. Even exposure prior to birth can have direct health impacts on the child due to physical injury that may occur as a result of the abuse.[15] Babies born to women who have experienced abuse are also more likely to be of lower birth weight[16], which may also lead to health complications. There are also negative consequences for babies and children if a mother uses self-destructive behaviours during pregnancy in order to cope with the immense stress.

Overall, the exposure to spousal violence is considered highly traumatic for children. Although it is possible for children who are exposed to spousal violence to never be directly abused themselves, there is a strong link between the presence of spousal violence and child abuse. Regardless, exposure to violence can have lifelong consequences, as children struggle to cope with this trauma and learn how to interact with others outside the home.[17] There is also an area of research that suggests trauma and exposure to violence can also have an impact on normal brain development.[18]

The Role of the Health Professional

Health professionals are in a position to help women who are being abused in a way that other professionals are not. Women who may not report to the RCMP, family violence shelters, or other service organizations may seek medical attention. This may be for direct physical injury that occurred as a result of the abuse, for routine medical care, or for pre/postnatal care. Given the vast health impacts of violence and exposure to violence for both women and children, it is vital that health practitioners are aware of the issue and how to intervene in a supportive manner.

Screening

In order to intervene or assist in any manner, the health practitioner must first be aware that spousal assault is an issue. At this point in time, it is important to note that anyone can be a victim of spousal violence, so it is sometimes not possible to know if abuse is present simply by looking at a person. For this reason, some jurisdictions have mandatory screening procedures in place at either an emergency room or prenatal entrance points. There are a number of screening tools that can be used by health professionals that all have various strengths and weaknesses.

A quick and simple tool is the SAFE tool[14]

S: How would she describe her spousal/intimate relationship?

A: What happens when she and her partner argue?

F: Do fights result in her being hit, shoved or hurt?

E: Does she have an emergency plan?

This tool can be quickly memorized and utilized. The exact wording of the questions is not important as long as there are questions asked that elicit the same information, in the same order as presented. This tool can be easily worked into a general conversation with women under the guise of getting a medical/social history. If there is no abuse or concerning behavior disclosed during the first three questions, there is no need to ask the final question. It is important to never ask these questions unless the woman is alone with you. If her partner refuses to let her see you alone, consider that a warning sign that abuse might be present. You

can get creative in finding a way to speak to her alone. For instance, you can request a urine sample and then follow her (or have a female nurse follow her) into the bathroom.

It might be necessary to use this tool with the same woman on more than one occasion, before she discloses abuse. Women have many reasons to not disclose, with fear being a prominent reason. Some may not be aware of the support systems and resources that are available to help them, or if they are aware, may not trust in their effectiveness. Many may hope their partner will change, being unwilling to face the reality that the only way to have safety in their lives is to leave. It may also seem odd to women at first, that a health practitioner is interested and concerned about their well being in their relationship. This would be especially the case if a health practitioner has never asked these sorts of questions before, or if they had disclosed abuse to a health professional in the past who did not know what to do. If you suspect abuse is present, but the woman does not trust you enough to disclose, it is important to let her know that you are there for her whenever she is ready to talk.

Referral

If a woman discloses abuse to you, it is important to never pressure her to leave her partner. Women may be financially dependant on their partner, resulting in an inability to secure money, food or shelter for themselves and any children they may have. It usually takes a long time for women to make the decision to leave, and many return to the relationship numerous times. Instead, provide her with as much factual information about abuse as you can, especially about the effect of exposure to abuse on children. If you suspect that the child is at risk and you need to make a referral to Child Protection, let the woman know you are concerned for both her and her children. A report to Child Protection does not need to be traumatic if it is handled with care and concern.

You can also refer her to other community resources, including family violence shelters. If there is not a shelter in your community, she can go to another community to seek shelter. The social worker in your community can assist her with making these arrangements. All the shelters in the NWT accept collect phone calls from women who just need to talk about their situation. The shelter in Yellowknife, Alison McAteer House, also has a toll-free number women can call: 1-866-223-7775.

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NOTIFIABLE Diseases

CUMULATIVE TOTALS for the Northwest Territories (NWT) January - December 2006[a]

		January - December 2005 NWT	January - December 2006 NWT
Vaccine Preventable Diseases	Hepatitis B	0	0
	Haemophilus Influenza	0	3
	Influenza A	12	19
	Influenza B	3	14
	Pertussis	5	2
	Chicken Pox	17	24
Sexually Transmitted/ Bloodborne Diseases	Chlamydia	723	700
	Gonorrhea	140	180
	Hepatitis C	22	21
	Hepatitis, Other	0	0
	Syphilis	0	0
Diseases by Direct Contact/ Respiratory Route	Invasive Group A Strep	1	5
	Invasive Group B Strep in neonates	0	0
	Invasive Group B Streptococcus	0	2
	Invasive Pneumococcal Disease	13	12
	Legionellosis	0	0
	Listeriosis	0	0
	Meningitis/Other Bacterial	0	0
	Meningitis/Unspecified	0	0
	Meningitis/Viral	0	0
	Meningococcal Infections	1	1
	Respiratory Syncytial Virus	53	13
	Tuberculosis	8	6
Enteric, Food and Waterborne Diseases	Botulism	1	0
	Campylobacteriosis	6	8
	Cryptosporidiosis	1	0
	E.Coli 0157:H7	3	0
	Giardiasis	6	8
	Hepatitis A[b]	0	0
	Salmonellosis	3	8
	Shigellosis	0	0
	Tapeworm	0	0
	Trichinosis	0	0
	Yersinia	0	0
Vectorborne/ Other Zoonotic Diseases	Brucellosis	0	0
	Malaria	0	0
	Rabies Exposure	7	5
Antibiotic resistant microorganisms	Methicillin-resistant Staph. Aureus	23	14
	Vancomycin-resistant Enterococci	0	1

NWT HIV Infections Reported from 1987 to 2006

	Age at Diagnosis								Gender		Risk Category					
Total	0-9	10-14	15-19	20-29	30-39	40-49	50-59	60+	Female	Male	MSM[b]	MSM/ IDU[c]	IDU	Hetero-sexual	Perinatal	Blood Products
31	1	0	0	5	17	6	1	1	6	25	13	1	7	8	1	1

a Statistics are based on currently available data and previous data may be subject to change
b Men who have sex with men (MSM)
c Injection Drug User (IDU)

Updated February 19, 2007
Office of the Chief Medical Officer

NOTIFIABLE Diseases

CUMULATIVE TOTALS for the Northwest Territories (NWT) January - December 2006[a]

		January - December 2005 NWT	January - December 2006 NWT
Vaccine Preventable Diseases	Hepatitis B	0	0
	Haemophilus Influenza	0	3
	Influenza A	12	19
	Influenza B	3	14
	Pertussis	5	2
	Chicken Pox	17	24
Sexually Transmited/ Bloodborne Diseases	**Chlamydia**	**722**	**700**
	Gonorrhea	**140**	**180**
	Hepatitis C	**22**	**21**
	Hepatitis, Other	**0**	**0**
	Syphilis	**0**	**0**
Diseases by Direct Contact/ Respiratory Route	Invasive Group A Strep	1	5
	Invasive Group B Strep in neonates	0	0
	Invasive Group B Streptococcus	0	2
	Invasive Pneumococcal Disease	13	12
	Legionellosis	0	0
	Listeriosis	0	0
	Meningitis/Other Bacterial	0	0
	Meningitis/Unspecified	0	0
	Meningitis/Viral	0	0
	Meningococcal Infections	1	1
	Respiratory Syncytial Virus	53	13
	Tuberculosis	8	6
Enteric, Food and Waterborne Diseases	**Botulism**	**0**	**0**
	Campylobacteriosis	**6**	**9**
	Cryptosporidiosis	**1**	**0**
	E.Coli 0157:H7	**3**	**0**
	Giardiasis	**6**	**8**
	Hepatitis A	**0**	**0**
	Salmonellosis	**3**	**9**
	Shigellosis	**0**	**0**
	Tapeworm	**0**	**0**
	Trichinosis	0	0
	Yersinia	0	0
Vectorborne/ Other Zoonotic Diseases	Brucellosis	0	0
	Malaria	0	0
	Rabies Exposure	7	5
Antibiotic resistant microorganisms	**Methicillin-resistant Staph. Aureus**	**23**	**14**
	Vancomycin-resistant Enterococci	**0**	**1**

NWT HIV Infections Reported from 1987 to 2006

	Age at Diagnosis								Gender		Risk Category					
Total	0-9	10-14	15-19	20-29	30-39	40-49	50-59	60+	Female	Male	MSM[b]	MSM/ IDU[c]	IDU	Hetero-sexual	Perinatal	Blood Products
31	1	0	0	5	17	6	1	1	6	25	13	1	7	8	1	1

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